WHAT IS CLAIMED IS:

1. An integrated circuit substrate comprising:

a first surface for receiving a series of aligned layers during the creation of the integrated circuit, and

a second surface disposed substantially opposite the first surface, the second surface having at least one alignment mark for aligning the series of aligned layers one to another during the creation of the integrated circuit.

2. The substrate of claim 1 wherein the second surface is divided into a first half and a second half, with one alignment mark in each of the first half and the second half.

3. The substrate of claim 1 wherein the second surface is divided into quadrants, with one alignment mark in each of the quadrants.

4. The substrate of claim 1 wherein the at least one alignment mark is printed on the second surface.

5. The substrate of claim 1 wherein the at least one alignment mark is recessed into the second surface.

6. The substrate of claim 1 wherein the at least one alignment mark comprises geometric shapes in a pattern.

7. An apparatus for aligning the series of aligned layers to the substrate of claim 1.

8. An integrated circuit, the improvement comprising a series of aligned layers aligned upon at least a portion of the substrate of claim 1.

9. An apparatus for aligning a mask having an image and at least one complimentary alignment mark to a substrate having a first surface and a substantially opposing second surface, the substrate further having at least one alignment mark on the second surface, the apparatus comprising:

a mask support for supporting the mask in proximity to the first surface of the substrate,

a substrate support for supporting the substrate with the first surface in proximity to the mask,

an alignment means for aligning the at least one alignment mark on the second surface of the substrate to the at least one complimentary alignment mark on the mask,

an exposure source for projecting the image of the mask onto the first surface of the substrate, and

a controller for controlling the mask support, substrate support, alignment means, and exposure source.

10. The apparatus of claim 9 wherein the exposure source produces electromagnetic radiation with a wavelength corresponding to at least one of visible light, ultraviolet, x-ray, and laser.

11. The apparatus of claim 9 wherein the alignment means further comprises:

a first sensor for detecting the at least one alignment mark on the second surface of the substrate and for producing an image of the at least one alignment mark,

a second sensor for detecting the at least one complimentary alignment mark on the mask and for producing an image of the at least one complimentary alignment mark,

a compositor for visibly overlaying the image of the at least one alignment mark and the image of the at least one complimentary alignment mark, and

movement controls for moving at least one of the substrate support and the mask support relative to the other and for aligning the image of the at least one alignment mark to the image of the at least one complimentary alignment mark.

12. The apparatus of claim 9 wherein the alignment means further comprises:

a projection means for projecting an image of the at least one alignment mark through the substrate,

a sensor for detecting the image of the at least one alignment mark projected through the substrate, and also for detecting an image of the at least one complimentary alignment mark on the mask, and

movement controls for moving at least one of the substrate support and the mask support relative to the other and for aligning the image of the at least one alignment mark projected through the substrate to the image of the at least one complimentary alignment mark.

13. A substrate having at least one alignment mark for use with the apparatus of claim 9.

14. An integrated circuit, the improvement comprising a series of aligned layers aligned using the apparatus of claim 9.

15. A method for aligning a mask having an image and at least one complimentary alignment mark to a substrate having a first surface and a substantially opposing second surface, the substrate further having at least one alignment mark on the second surface, the method comprising the steps of:

disposing the mask in proximity to the first surface of the substrate,

creating an image of the at least one alignment mark,

creating an image of the at least one complimentary alignment mark,

moving at least one of the mask and the substrate relative to the other and aligning the image of the at least one alignment mark to the image of the at least one complimentary alignment mark, and

projecting the image of the mask onto the first surface of the substrate.

16. The method of claim 15, wherein the steps of creating an image of the at least one alignment mark and creating an image of the at least one complimentary alignment mark further comprise:

detecting the at least one alignment mark on the second surface of the substrate,
producing an image of the at least one alignment mark,
detecting the at least one complimentary alignment mark on the mask,
producing an image of the at least one complimentary alignment mark, and
visibly overlaying the image of the at least one alignment mark and the image of the at least one complimentary alignment mark.

17. The method of claim 15, wherein the steps of creating an image of the at least one alignment mark and creating an image of the at least one complimentary alignment mark further comprise:
projecting an image of the at least one alignment mark through the substrate,
detecting the image of the at least one alignment mark projected through the substrate with at least one sensor, and
detecting an image of the at least one complimentary alignment mark on the mask with the at least one sensor.

18. A substrate having at least one alignment mark for use with the method of claim 15.

19. An integrated circuit, the improvement comprising a series of aligned layers aligned using the method of claim 15.

20. An apparatus for aligning a mask to a substrate according to the method of claim 15.